



A.D. 1819 N° 4350.

SPECIFICATION

OF

ÆNEAS MORRISON.

PRESERVING ANIMAL AND VEGETABLE
SUBSTANCES.

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Preserving Animal and Vegetable Substances.

MORRISON'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ÆNEAS MORRISON, of the City of Glasgow, Writer, send greeting.

WHEREAS I, the said Æneas Morrison, did, by my petition, humbly represent to His present most Excellent Majesty King George the Third, that I
5 had invented, discovered, and found out "A COMBINATION OF CERTAIN PROCESSES AND MANUFACTURES WHEREBY ANIMAL AND VEGETABLE FOOD MIGHT BE PRESERVED FOR A GREAT LENGTH OF TIME," which would of great benefit and advantage to His Majesty's subjects; and that I was the first and true inventor of the combination of the said processes and manufactures, and that the same had
10 not been used or exercised by any person or persons whatsoever, to the best of knowledge and belief, and praying that His Majesty would be graciously pleased to grant unto me, and my executors, administrators, and assigns, His Royal Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, for the sole use, benefit, and advantage of the said
15 Invention within that part of His Majesty's United Kingdom called England, and His Dominion of Wales, Town of Berwick-upon-Tweed, and also within His Colonies and Plantations abroad, for the term of fourteen years, pursuant to the Statute in that case made and provided; and whereas His said Majesty, being willing to give encouragement to all arts and inventions that might be
20 for the public good, was graciously pleased to condescend to my request, and did therefore by His Royal Letters Patent, dated at Westminster, the Twenty-

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third day of March, One thousand eight hundred and nineteen years, in the fifty-ninth year of His reign, of His especial grace, certain knowledge, and mere motion, give and and grant unto me, the said Æneas Morrison, my executors, administrators, and assigns, His special licence, full power, and sole privilege and authority, that I, the said Æneas Morrison, my executors, administrators, and assigns, and every of them, by myself and themselves, and my and their deputy or deputies, servants, and agents, or such others as I, or my executors, administrators, or assigns, shall at any time agree with, and no others, from time to time and at all times during the term of fourteen years therein expressed, shall and may lawfully make, use, exercise, and vend 10 my said Invention, within that said part of His Majesty's Dominions called England, and His Dominion of Wales, Town of Berwick-upon-Tweed, and also within His Colonies and Plantations abroad; and that I, and my executors, administrators, and assigns, should and might have and enjoy the whole profit, benefit, use, commodity, and advantage, from time to time coming, growing, 15 accruing, or arising by reason of the said discovery, for and during the term of years therein mentioned, to have, hold, exercise, and enjoy the said licence, powers, privileges, and advantages therein-before granted, or mentioned to be granted, to me, the said Æneas Morrison, my executors, administrators, and assigns, for and during and to the full end and term of fourteen years from the 20 date of the said Letters Patent next and immediately ensuing, and fully to be complete and ended according to the Statute in such case made and provided; in which said Letters Patent is contained a proviso, that if I, the said Æneas Morrison, should not particularly describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, by an Instrument 25 in writing under my hand and seal, and cause the same to be enrolled in His Majesty's High Court of Chancery within six calendar months after the date of the said Letters Patent, that then the said Letters Patent, and all liberty and privileges thereby granted, should utterly cease, determine, and become void, anything therein-before contained to the contrary thereof in anyways 30 notwithstanding, as in and by the said Letters Patent (relation being thereunto had) may more fully and at large appear.

NOW KNOW YE, that I, the said Æneas Morrison, in compliance with the said proviso, do hereby describe and ascertain the nature of my said Inventions. And I declare the first of these to consist in the inclosing and 35 cooking food in vessels, from which, during the process of cooking, the atmospheric air is discharged, and in rendering these vessels permanently air tight, so as to prevent the re-admission of the atmospheric air, and this is to be performed as follows:—

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Prepare a cooking furnace, consisting of several hollow iron trunks built in, so that while their mouths are accessible from without the heat is distributed and applied to their bodies within, and each trunk rendered a separate oven; to each trunk fit a lid, with bearers attached to sustain the vessels employed, and pass through the centre of the lid a hollow iron tube, acting as a screw, having a reservoir attached to the under part of it, and a filler to the upper part, with a stop cock at the lower extremity, and another between the reservoir and the filler, the lower end of the tube being fitted to the mouth of the tin tube after mentioned, so as to form an air tight joint; procure jars or bottles, in the manufacture of which the principal things to be attended to are, that such vessels be made perfectly air tight and calculated to expand equally when heat is applied to them, the mouths contracted so as to sustain the cock when pressed upon from without, and the shape such as to resist the pressure of the atmosphere; vessels made of salted ware are most suitable; cut bungs of cork wood in the usual way, and make a perforation in the centre to receive the tube after mentioned; coat the under part and sides with moistened bladder; when the bladder has become perfectly dry make an orifice in it opposite the perforation in the bung, and pass through the bung a tube of block tin or other metal, having a button to press upon the bladder at the one end and a screw upon the other; apply lute round the upper part of the tube, and place upon the bung a circular piece of bladder, sufficient to cover the mouth of the vessel, passing the tube through an orifice in the bladder, and by means of a washer and nut applied to the screw on the end of the tube, bind the bung and bladder firmly together; cut off such part of the tube as may project above the nut, and trim the mouth of the tube with a centre bit or other suitable instrument; apply the bung to the mouth of a vessel containing food to be preserved, and place above it a block, having an opening in the centre sufficient to admit the screw nut; by means of a screw press, force down the bung below the level of the lip of jar; place between the circular piece of bladder and the bung a quantity of lute sufficient to form a crust or cake; bind the bladder firmly round the neck of the vessel; place on the top of it a cape having an opening in the centre to permit access to the tin tube; place the vessel in a moveable press, and screw the cape firmly down upon the bung; by means of a filler introduce as much suitable liquid as will completely charge the vessel; place the vessel upon the bearer attached to the lid of the oven; charge the reservoir attached to the iron tube with liquid, corresponding with the contents of the vessel; screw the lower extremity of the iron tube into the mouth of the iron tube; turn the lower stop cock so as the contents of the jar and the contents of the reservoir

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may communicate; place the vessel thus prepared in the oven. When the contents are cooked, turn the upper stop cock, and remove the whole from the oven, and when ebolution has ceased and sufficient time has been allowed to permit so much of the contents of the reservoir to pass into the vessel as to charge it completely, drop into the iron tube, so as it may rest on the upper 5 stop cock, a metallic pin, calculated to fill half the length of the tin tube and to fix itself in its lower extremity and render it air tight; turn the stop cock, and instantly, by passing a rod through the iron tube by percussion, drive the pin home; turn both the stop cocks, to prevent the liquor remaining in the reservoir from escaping, and unscrew the iron tube, and carefully wipe the 10 mouth of the tin tube, and fill it with lute or solder, and when perfectly cold take the vessel from the press, and the manufacture is completed. When corks are to be used, form them in the usual manner, make a perforation in the centre for the admission of the tube after described; coat them with bladder, and by a screw press force them down to a level with the lip of the 15 vessel; prepare a conical tube of block tin or other metal, with a button at one end, and a conical bodkin, calculated to fill the tube, having a button also, and of such length as the point thereof may project beyond the point of the tube; place the bodkin in the tube and pass the points of the bodkin and tube through a circular piece of bladder, sufficient to cover the neck of the vessel; 20 fix the point of the bodkin in the perforation in the cork; lute the cork; bind the bladder firmly round the neck of the vessel; with a screw press force home the bodkin and tube; withdraw the bodkin from the tube, and proceed with the vessel as before directed. Or the same process may be perfected by employing a bath of boiling water in place of the oven, observing this difference, 25 that a cross bar be substituted in place of the lid of the oven, through which the screw of the iron tube may be wrought, and that the distance between the reservoir and the filler be increased, so that when the vessel and reservoir are emerged in the boiling water access may be had to the upper stop cock. When the substances to be preserved do not afford sufficient liquor to fill the 30 vessel, let the pin be driven home before removing the vessel from the oven or bath, and while the vessel is completely charged with steam. Tin or other metallic packages may be substituted for jars or bottles, in which case let the tin tube be soldered into a conical projection raised on the top of the package, and the package being fixed in a moveable press, let the same process be 35 followed out as before directed when jars or bottles are employed. It is difficult to procure cork wood of sufficient strength to resist the pressure of the atmosphere when the diameter of the bung exceeds four inches, and it is therefore necessary, when the bungs are large, to strengthen them by increasing

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the breadth of the washer. The lute may be composed of any materials which form an air tight paste ; white of egg, mixed with ground rice, or a mixture of one third tallow and two thirds rosin, answer well. In forming the bungs and cork, it is of advantage to moisten the bladder with white of egg
 5 where the button of the tube is to come in contact with it, and in corking to moisten the edge of the bung or cork and the mouth of the vessel with the same substance. The cape for the vessels may be of cast iron, with a cushion at the bottom of felt or other soft substance. Let there be openings in the side of the iron tube, upon a level with the top and bottom of the reservoir,
 10 and the bottom of the filler, to allow the air to escape and the liquor to pass, and let the tube itself project beyond the top of the filler to receive the pin. The bladder, previous to being applied to the cock or vessel, to be steeped for twenty-four hours in a mixture of shumac, animal charcoal, and water.

15 And I declare my second Invention to consist in the enclosing food in vessels which, previous to and in the process of cooking, are rendered perfectly air tight by means of a cork or bung prepared as follows :—Cut bungs or corks in the usual way, and coat the under part and sides with prepared bladder, as before directed ; apply the cork to the mouth of the vessel, and by means of
 20 a screw press force it a fourth part of an inch below the level of the lip of the vessel ; cover the cork with such a lute as will, when dry, adhere to the cork in a solid mass ; cover with bladder the mouth of the vessel, and bind the bladder firmly round its neck, and place upon the mouth of the vessel a cape having a cushion of soft laid hemp, or other material calculated to make a steam tight
 25 joint ; put the vessel into a press, and screw the cape so firmly down as to prevent the communication of steam or water with the bladder ; place the whole in a steam or water bath 'till the contents of the jar are fully cooked, and when removed from the bath and perfectly cool, withdraw the vessel from the press, and the manufacture is completed. A lute composed of one third
 30 tallow and two thirds rosin answers well. A Drawing illustrative of the description herein contained accompanies this Specification, and is subscribed by me as relative hereto. And lastly, I declare that I do not claim as my Invention the preserving food in air tight vessels, but the combination of the several manufactures before described, by which, in the various modes I have
 35 pointed out, that object may be accomplished.

In witness whereof, I, the said Æneas Morrison, have hereunto set my hand and seal, this Thirtieth day of August, in the Fifty-ninth year of the reign of His said most Excellent Majesty George the Third, by the

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Grace of God of the United Kingdom of Great Britain and Ireland
King, Defender of the Faith, &c. and in the year of our Lord One
thousand eight hundred and nineteen.

ÆNEAS MORRISON. (L.S.)

Signed, sealed, and delivered by the
above said Æneas Morrison, being
first duly stamped, in the presence of

PETER MACKENZIE,

Clerk to the above Æneas Morrison.

MALCOM MCOIG, Witness,

Clerk to the above Æneas Morrison.

Malcolm MCoig, Clerk to Æneas Morrison, of the City of Glasgow,
Writer, maketh oath and saith, that he did see the said Æneas Morrison, who
is named in the deed poll hereunto annexed, sign, seal, and as his act and deed
in due form of law deliver the said deed poll, and also sign the Drawing
hereunto annexed as relative to the said deed poll, in the presence of Peter
Mackenzie, Clerk to the said Æneas Morrison, and this deponent; and that
the names "Æneas Morrison" appearing to be set and subscribed to the
said deed poll, as the party executing the same and to the said Drawing, and
"Peter Mackenzie," and "Malcolm MCoig," set and subscribed to the said
deed poll and drawing, as witnesses attesting the due execution of the same,
are of the respective hands writing of the said Æneas Morrison, Peter Macken-
zie, and this deponent.

MALOM MCOIG.

Sworn before me, Lord Provost and
Chief Magistrate of the City of
Glasgow, and one of His Majesty's
Justices of the Peace for the County
of Lanark, at Glasgow, the Thir-
teenth day of September, One
thousand eight hundred and nine-
teen years.

HENRY MONTEITH, Provost and J. P.

Inrolled the Seventeenth day of September, in the year above written.

LONDON:

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Printers to the Queen's most Excellent Majesty. 1855.

FIG. II.

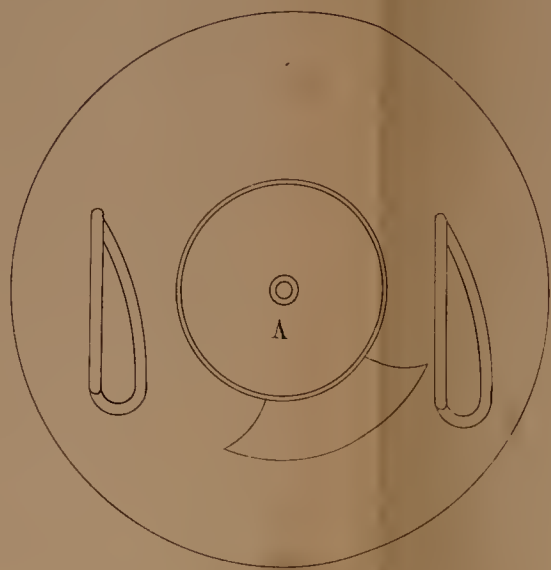


FIG. IV.

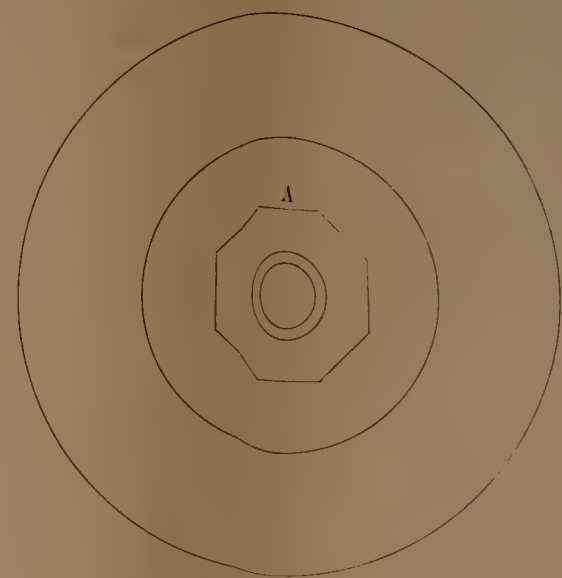
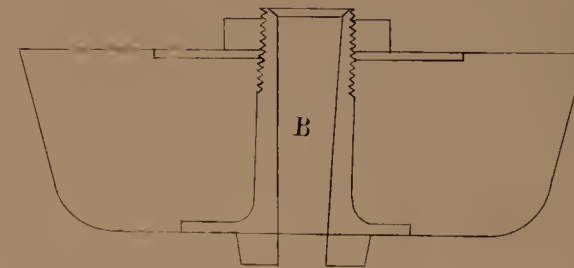
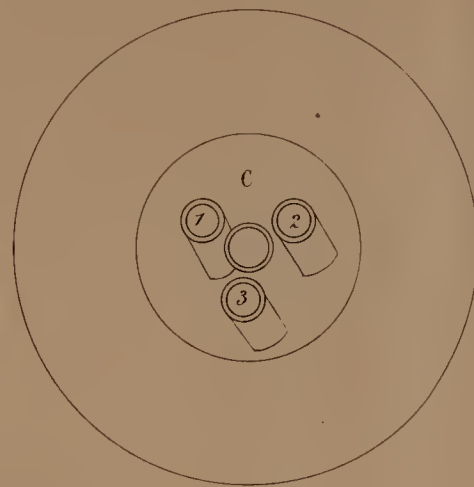


FIG. III.

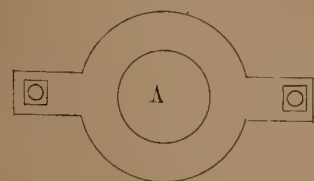


FIG. I.

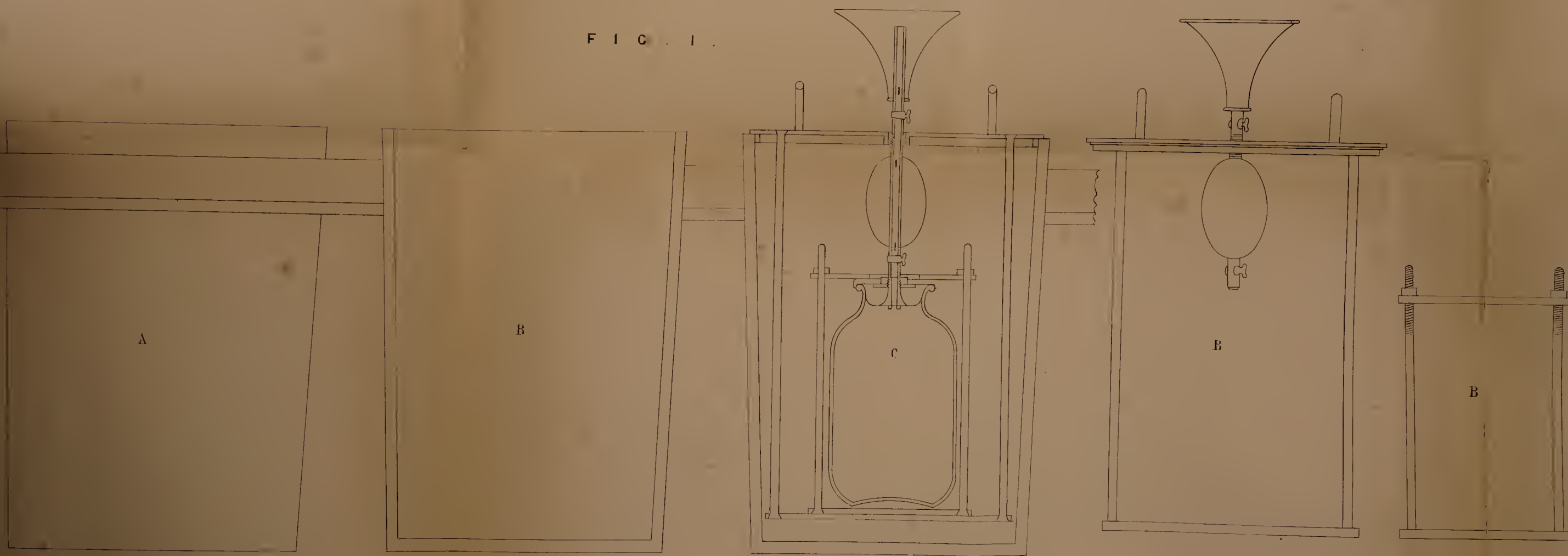


FIG. V.



FIG. I. Represents an oven of three Trunks.

A Trunk with the lid.

B Trunk without the lid.

C Interior of the Trunk.

FIG. II. Represents the lid of a Trunk.

A the cover fitted to the mouth of the Trunk.

B the bearers, iron tube, filler and reservoir.

C the bottom attached to the bearers.

FIG. III. Represents the moveable press.

A the cross bar which is screwed down on the cap.

B the body of the press.

C the bottom of the press.

FIG. IV. Represents a Bung.

A the top.

B the body.

C the bottom having three catch pins 1 2 3 to steady the tube while screwing home the nut.

FIG. V. Represents a conical tube and bodkin.

